

ABSTRACT

A running tool for a liner hanger has a mandrel supported by latch segments housed in a latch cage, the latch segments being engaged in the tubular portion of the hanger. In one mode, the latch cage is supported on latch shoulders temporarily restrained to the mandrel by a locking cylinder. Support of the latch cage ensures the latch segments remain engaged. Hydraulic actuation of the locking cylinder releases the latch shoulders, releasing the latch cage to move axially and disengage the latch segments. The mandrel is also supported using a drive housing axially engaging the liner hanger. If the hydraulic actuation fails, an indexed and relative reverse rotation of the mandrel releases the mandrel to lower through the drive housing and through the latch cage housing to the disengaged position. A barrel ratchet enables transmission of driving torque in one direction and ratcheting in a reverse direction.